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SURVEY# 1093397

DATE OF REPORT: 7/21/09 VESSEL:

F/V "NORTHEN EXPLORER"

This is to certify that the undersigned Surveyor, at the request of Ms. Lorinda Kassner of the Alaska Division of Investments, did attend aboard the fishing vessel "NORTHERN EXPLORER", Official No. 581477, on, 13 July, 2009, while it was under Marshall's arrest in Eliason Boat Harbor, in Sitka, Alaska, for the purpose of determining its condition, its current fair market valuation, and its general suitability for intended service regarding insurance and finance. The date of this report is the effective date of valuation.

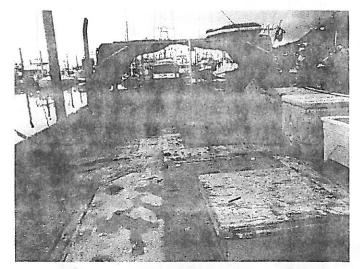
GENERAL DESCRIPTION

The "NORTHERN EXPLORER" is a welded steel former clam dredger / dragger. It has a raked stem, a modified V, relatively shallow draft bottom with hard chine bilge, and a transom stern. The deckhouse is located forward with a raised pilothouse atop. and decks are on a single level bow to stern. The vessel has most recently been operated in commercial inshore longline fisheries with a limited hold capacity. Aside from a single line hauler there is no other fishing gear aboard and electronics are minimal. The overall appearance is fair to good. The interior is very simply finished with a combination of domestic wood-patterned paneling, newer Birch plywood in the head, some vinyl surfaced Melamine, and a limited amount of carpeting. There is some bare steel exposed in the aft part of the deckhouse. Trim and finish are minimal.

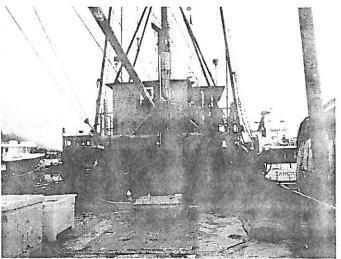
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JUL 27 2009

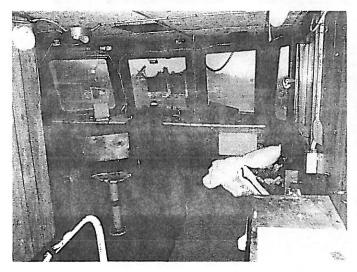
VESSEL: F/V "NORTHERN EXPLORER"



Main deck looking aft



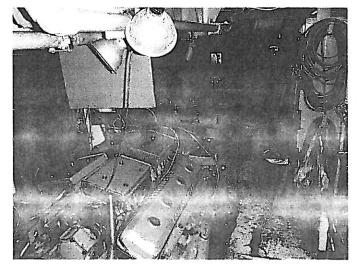
Main deck looking forward



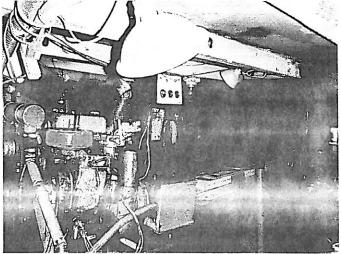
Pilothouse



Galley



Engine room



Aft machinery space

VESSEL:

F/V "NORTHERN EXPLORER"

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VESSEL LAYOUT

Foremost on the main deck level is the bow, aft a small foredeck enclosed by high bulwarks, aft a small trunk with raised coaming and steel hatch cover opening to a void. Aft is the main deckhouse, with a small enclosed crew quarters having single berths forward and to Starboard, stowage beneath. through a hinged door facing inboard is the forward galley; here, to Port is a counter with stowage beneath and in an upper cabinet, aft in a raised cabinet is a domestic electric oven and microwave, aft additional counter with double basin stainless sink and a domestic electric range top. To Starboard, inboard is a small table, outboard past a curtain is an enclosed head with shower stall, a counter with a single basin sink, and a marine toilet. Aft is a stair to the pilothouse, aft a flush hatch in the sole for access to the engine room, inboard the galley refrigerator, outboard to Starboard a domestic upright freezer and stowage space in a stepped up Starboard extension of the cabin, aft a weathertight aluminum door to the main deck. Here, abaft the cabin is the main mast and an open exhaust recess, aft is the main hatch, which is 3' on a side with a 16" wood coaming and a plywood hatch cover. Aft is open deck, with a welded aluminum bait shed 7' X 20' at the stern. a watertight hatch in the deck provides access to the lazarette.

Foremost on the lower deck level is a void, which at the time of survey was 60% filled with water, presumably as ballast. Below it is the vessel's fresh water tank. Aft is the engine room, aft, through a watertight hatch is a void surrounding the vessels dry hold, which is a steel insert with unlined sprayed foam on the interior. Its capacity is approximately 650 cubic feet, which equates with approximately 34,000# of fish, and it is fitted with a small four-fan blast freezer. To Port of the hold is a hydraulic reservoir and sanitary holding tank. To Starboard are a domestic washer-dryer and a walkway to an open machinery space with auxiliary generator, a small refrigeration unit, and stowage. Aft is a watertight ballast compartment, capacity unknown, with non-watertight hatch covers on deck. Aft is the lazarette, and the steering gear.

The upper deck consists of a pilothouse with helm on a full-width console, to Port a chart table, aft an enclosed, open stateroom. To Starboard is a pilot berth, aft an open area and a hinged wooden door to a narrow surrounding upper deck with railing and accessing the anchor windlass forward of the pilothouse.

SURVEYOR'S NOTES

As the vessel was surveyed while afloat, no observation of the hull below waterline for wear and tear, corrosion, or unrepaired damage could be made, and no opinion is offered. The hull lacks longitudinal stringers above the level of the chine, and as a result, the hull is dished aft of amidships. For the purpose of achieving a valuation only, the underbody has been assumed to be in satisfactory condition for safe operation, and free of significant defects.

The vessel's main engine, which may have been overhauled and started well, and the drive train, as well as both auxiliary engines, were operated briefly in the slip for evaluation, and appear to be in satisfactory condition for normal use. The #1 generator required ether for starting. Neither generator was put on line to test the electrical output. No sea trial was performed on the vessel. For a more complete evaluation of overall condition, a mechanical survey is recommended.

As surveyed, the vessel presently lacks sufficient fishing gear for viable operation. It has some tendering capacity, though with the extremely limited hold capacity for a vessel of its size, the NORTHERN EXPLORER would be forced to rely on deck carriage of fish totes, and there is no stability plan aboard to define that operation. Upon compliance with starred (**) Recommendations, and assuming prudent use by the operator under reasonable sea and weather conditions for a vessel of this size, this vessel should then perform satisfactorily within its physical limitations for the intended use of commercial fishing or limited fish tendering service on the coastal and inland waters of Southeast Alaska. For further observations, see the RECOMMENDATIONS.

This is a Limited Report of Survey. It sets forth the apparent condition of the vessel, including hull, machinery, equipment, fittings, and gear, to the best of the Surveyor's ability without removal of bulkheads, panelings, ceilings, or other portions of its structure, without the opening of its machinery or its auxiliaries for internal examination or their operation for performance study, and without the scaling of masts or rigging. It represents the Surveyor's honest and unbiased opinion, based on his opinions, experience, and work within the marine industry. The Surveyor accepts no responsibility for omissions based on information that has not been brought to his attention, nor for errors based on information not normally discoverable while acting with due diligence, nor for any conditions that may arise from said errors or omissions. In submitting this survey, it is understood by all parties concerned that this survey is not to be considered a guarantee of its accuracy, nor does it create any liability on the part of the Surveyor arising from the reliance on the information contained herein.

JUL 2 7 2009

CONFIDENTIAL MARINE SURVEY REPORT

VESSEL F/V "NORTHERN EXPLORER"

TYPE Oil Screw / Displacement / Pot & longline fishing

BUILDER Sun Contractors, Harvey, La. YEAR 1977

SPEC. Welded steel hard chine fishing vessel; former clam dredge, recently in longline and pot shellfishery

ADF&G #64572

OFFICIAL NO. 581477 L.O.A. 68.0'

REG.L. 63.0' BEAM 20.0' DRAFT 8.0'

DEPTH 10.4' **GROSS** NET 57

SERVICE Commercial fishing

PRIMARY AREA OF Coastal Waters of S. E. Alaska

OPERATION

OWNER State off Alaska Division of Investments

REQUESTED BY Lorinda Kassner

P. O. Box 34159 **ADDRESS**

Juneau, AK 99803

ATTENDING Caretaker Rick Whitson and Surveyor

HULL STRUCTURE

MATERIAL Mild Steel

THICKNESS 1/4" shell, 5/16" bottom

Transverse 1/4 X 3" angles, 24" on center and **FRAMING**

transverse bulkheads

TRUSSES/ BEAMS Transverse 1/4 X 3" angles, 24" on center

DECKS 1/4" and 5/16" steel

BULKHEADS Four steel; forward is watertight

Welded **FASTENED**

GUARDS 6" pipe section main guard, removed Starboard

side amidships; 3" pipe cap at sheer

CEILING

STRINGERS 2 X 3" angles 24" on center, aft hull bottom only.

36" depth 5/16" plate engine room to fish hold

CLAMPS N.A.

SHELF N.A.

OTHER

BULWARKS / 1/4" steel hull extensions with 3" pipe caps; 3" pipe section stanchions 4' on center. 60" height **FREEING**

PORTS @ bow, 30" amidships to stern. Four 8 X 12"

freeing ports ea. side main deck

Welded 3/16" steel with LEXAN fixed windows and HOUSE wooden door in top house, portlights and aluminum

door, main house, plywood and veneer panel interior

SURVEY # 1083213

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SURVEY # 1083213

REPORT DATE 3/18/08

DATE OF SURVEY 3/14/08

LOCATION

Afloat in Eliason Boat Harbor, Sitka, Alaska

MAIN ENGINE(S)

MAKE GMC/DETROIT

MODEL 12V-71

Serial # not observed

CYLINDERS 12

HP 365

AGE Unknown

32V START

RPM 2450

G.P.H.

ASPIRATED Supercharged

VENTILATION One 5 X 24" cowl

CONTROLS MORSE cable throttle and shift, 2 stations

COOLING Box Keel EXHAUST Dry Stack

EXHAUST CLEAR OF WOODWORK? Requires lagging

ENGINE HRS Hour meters differ; unknown

BLOWERS

OVERHAUL MOH reported 12/05

None rea'd

RED. GEAR TWIN DISC MG 514

RATIO 6.0:1 CLUTCH Hydraulic

ALARMS Oil pressure, coolant temp, and level, not tested

ATTACHED UNITS

One est. 60 amp, 32V alternator, TWIN DISC manual front PTO with SPENCER est. 35 GPM hydraulic pump, GRESCEN 12 GPM hydraulic pump on CLUTCHMASTER cam drive, cooling pump, two DAHL fuel filters, dual pyrometers

BILGE CONDITION Oily in engine room

AUXILIARY ENGINE #1

1800

MAKE GMC / DETROIT

MODEL 2-71N 2-cycle

Serial # not found

CYLINDERS 2 HP **RPM** AGE Unknown

G.P.H.

12V START

ASPIRATED

Supercharged

VENT. W/ main

CONTROLS Integral

COOLING Keel cooler EXHAUST Dry stack**

EXHAUST CLEAR OF WOODWORK? Requires lagging

ENGINE HRS 6,646 on meter OVERHAUL Cyl head 2005

ALARMS Not tested

FIRE ARREST Portable

Drives a DELCO 20 KW, 3Ø generator, with a 12V USE alternator, cooling pump and RACOR fuel filter Accuracy of hour meter unknown

Located Starboard engine room

Alaska 🔍

NAVIGATION EQUIPMENT Division of Investment AUXILIARY ENGINE #2

JUL MAKE 26MC / DETROIT RITCHIE 6" hemispherical COMPASS MODEL 2-71N 2-cycle WHITE 6" card for autopilot Serial # not found ICOM IC-M59 VHF RADIO 1 **CYLINDERS** 2 AGE Unknown RAYTHEON RAY45 VHF RADIO 2 START 12V RPM 1800 G.P.H. STEPHENS SEA 209 RADIO 3 Single Side Band **ASPIRATED** Supercharged VENT. W/ main engine RADIO 4 CONTROLS Integral OTHER COOLING Keel cooler EXHAUST Dry stack LORAN EXHAUST CLEAR OF WOODWORK? Requires lagging RADAR FURUNO Mod. 1715 24 mile LCD-type ENGINE HOURS unknown OVERHAUL Minor, 2003 ALARMS FIRE ARREST Portable Not tested GPS / FURUNO GP 32 digital receiver **PLOTTER** USE Drives a DELCO 20 KW, 3Ø generator, with a 12V alternator, cooling pump and RACOR fuel filter Located in aft machinery space **FATHOMETER** RAYTHEON V850 color video

AUTOPILOT COMNAV Model 1001 with one #201 remote control

WATCH ALARM

LIGHTS Approved, with anchor light for steaming

SPOTLIGHT One manual-remote control

OTHER STANDARD Horizon LH-10 hailer / alarm

BATTERIES

NO. SIZE TYPE LOCATION 2-D 12V marine Helm console 4-D 8V marine Below sole, engine room 4 8-D 12V marine Adjacent Gen. #1 8-D 12V marine Adjacent Gen. #2

TRAYS All in wood or plastic boxes

PROTECTED All in wood or plastic boxes

DISCONNECT Vaportight switches on all but pilothouse and Gen. #2 batteries

ELECTRICS

TANKS - FUEL AND WATER

FUEL Dsl #2 CAPACITY 10,000 Gal. MAT'L Steel LOCATION Outboard in engine room

LINES Steel pipe, flex VALVES at tanks

VENT LINES Pipe, outboard

WATER CAPACITY 500 Gal. MAT'L Steel

LOCATION In bow

HOT WATER TANK 50 Gal. RICHMOND domestic 120V

LOCATION Port engine room

OTHER (1) 110 Gal. lube oil tank, 30 gal. hydraulic tank

(2) 200 Gal. hydraulic reservoir

LOCATION (1) Starboard side engine room (lube not in use)

(2) Starboard side of main fish hold

TANK MOUNTS Integral

HOLDING TANK One 30 Gal. plastic

SURVEY # 1083213 PAGE 5 OF 10

WIRE TYPE Stranded copper VOLTAGE 12, 32V

PROTECTION One 16-circuit 23V fuse block inside steering

console and one 4-circuit 12V fuse block above console; no dedicated switch panels,

some circuits appear unprotected.

FIXTURE TYPE Protected / unprotected

AC CIRCUITS Shore / On board circuitry with SQUARE D

ship-shore selector switch, CONSELECT generator selector panel W/ metering,

SQUARE D 19-circuit main 3Ø panel in engine

room and 4-circuit subpanel in pilothouse

BONDING Integral

HULL CONNECTIONS

VALVES 12" sea chest with gate valve, not in use; one 2"

ball for washdown, one 1 1/2" ball for refrigeration

system (inoperable)

PIPING Steel pipe and neoprene hose in fair to good

condition

STEERING AND SHAFTS

STEERING TYPE Roller chain to shaft to cable quadrant

STATIONS Wheelhouse, plus autopilot remote

RUDDER Not Inspected

TAILSHAFT 4" stainless steel

4" cold-rolled steel INTERMEDIATE SHAFT

INTERMEDIATE BEARINGS Not visible STERN BEARING

Not Inspected

PROPELLER Not Inspected

COUPLINGS One rigid-type visible

ZINC Not Inspected

PROTECTION

ANCHOR 300# DANFORTH-type

RODE 2 Fathoms 4/4" chain, 15 Fathoms 5/8" chain, 50

Fathoms 9/16" cable

WINDLASS ROWE enclosed hydraulic drum

One 12" i.d. step-tapered steel stepped on bottom. MASTS

four 3" pipe A-frame supports, climbing rungs

PULLMASTER PL-2 main boom topping winch HOIST /

WINCH

BOOMS One 5" steel, reported to be Sched. 80

HOIST / One ea. PULLMASTER PL-2 hoisting and vanging

WINCH

FIRE FIGHTING EQUIPMENT

FIXED SYSTEM NONE **TYPE**

APPROVED

SPACES SERVED

SENSORS RELEASE

PORTABLE 1 5.0# TYPE Dry Chem 2-A:10-B:C

Wheelhouse LOC TEST Tagged 5/94, gauge OK

PORTABLE 2 2.0# TYPE Dry Chem 4-B:C

LOC Wheelhouse TEST No tag, gauge OK

PORTABLE 3 10.0# TYPE Dry Chem 4-A;60-B:C

TEST Tagged 3/93, gauge OK LOC Galley, loose

TYPE CO2 5-B:C PORTABLE 4 5.0#

LOC Galley, loose TEST No tag or gauge

PORTABLE 5 20.0# TYPE CO2 15-B:C

LOC Engine room TEST Tagged 6/07

PORTABLE 6 20.0-# TYPE CO2 15-B:C

TEST Tagged 6/07 LOC Aft mach, space

FIRE ALARMS None found

REFRIGERATION

GALLEY KENMORE 18 cu. ft. domestic refer / freezer

AMANA 17 cu. ft. upright freezer

HOLD/ MANEUROP self-contained 5 HP refrigeration unit **OTHER** for LARKIN 4-fan blast freeze evaporator in fish

hold. Capacity est. 5 ton. Located aft machinery

space

SURVEY # 1083213

PAGE 6 OF 10

Two 3" steel pipe stabilizer poles, with 2 1/2" aluminum pipe forward stifflegs

RIGGING One 5" steel pipe drag crossbar with stabilizer pole

brackets on outboard ends

One 17" MARCO pot hauler on 3" steel pipe fixed

crab davit

Unknown 9" hydraulic deck winch

Two large steel stabilizer vanes

OTHER

PUMPS

MAKE	SIMER	TYPE	Centrif	DRIVE	120V
SIZE	3/4"	USE	Engine bilge, automatic		
MAKE	CRANE	TYPE	Centrif	DRIVE	220V
SIZE	1 1/2"	USE	Salt water washdown		
MAKE	ITT JABSCO	TYPE	Implr	DRIVE	12V
SIZE	1 1/2"	USE	Holding tank discharge		
MAKE	SIMER	TYPE	Centrif	DRIVE	220V
SIZE	1"	USE	Condenser cooling		
MAKE	STAR	TYPE	Centrif	DRIVE	120V
SIZE	3/4"	USE	Fresh water		
MAKE	HONDA	TYPE	Centrif	DRIVE	Gas
SIZE	2"	USE	Aux hold, fire, etc.		
MAKE		TYPE		DRIVE	
SIZE		USE			

USE BILGE One sighted in engine room, tested OK

TYPE

DRIVE

ALARMS

MAKE

SIZE

STOVES AND VENTILATION

HEATERS One 110V fan-forced located in pilothouse, plus

portable electric in main cabin

WHIRLPOOL 4-burner electric range top GALLEY

STOVE TAPPAN electric oven

FUEL NA HEAT SHIELD Adequate

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SAFETY EQUIPMENT

HORN

SKIFFS

8' ACHILLES inflatable, Hull# ACH00674K192, in

fair to good condition

CABIN VENTILATION Doors and windows

RAFTS

DBC 6 man Coastal Pack, static release to 6/2010

to 6/2010

TEST

JACKETS

5 adult survival suits SUITS

LIFERINGS Three, two with tethers **FLARES** SOLAS flare kit expired; at present three red hand-

held to 6/2010

E.P.I.R.B. ALDEN Category 1 406 MHz, static release to

2/2010, battery to 8/2010

None found

RAILINGS Welded 3/4" steel pipe rail, upper deck, with ladders to pilothouse roof and main deck

OTHER All required placards, CO detectors (batteries

expired)

SAFETY DEVICES EASILY ACCESSIBLE? Yes

EQUIPMENT NOT OTHERWISE NOTED

LESTER 40 amp, 32V, and POWER SOURCE Model PC 30, 12V non-marine battery chargers

7 X 20' Medium-duty welded aluminum bait shed on aft deck with back curtain, four quartz lights, bait tables

Two 500 Watt sodium crab lights, four 300 Watt quartz deck lights

GP Model WM3015C hi pressure water maker, rated 3 GPD, with 15 Gal. receiver, in engine room

Two cylinder air compressor with 20 gal. air tank, 5 HP 120V motor

MILLER AC / DC welder and oxyacetylene welding - cutting torch

WESTINGHOUSE Spacemate compact washer-dryer; WESTINGHOUSE microwave oven

One NKOTA 110V portable air compressor

Two medium and one small BONAR insulated plastic fish totes

One ea. DELTA and SEARS 6" bench grinders

Misc small hand tools, filters, etc.

APPARENT LEVEL OF CARE AND MAINTENANCE AND VALUATION CONSIDERATIONS:

Fair to good overall. Onshore design, suitable for fishing on inside and coastal waters. Small hold size and inefficient below decks layout hampers efficiency and tendering capacity. Cramped quarters with unfinished interior. Basic electronics package, little fishing gear. Requires modifications to compete well in current commercial fishing market in Alaska.

> CURRENT ESTIMATED FAIR MARKET VALUE OF VESSEL AS EQUIPPED CURRENT ESTIMATED REPLACEMENT COST NEW OF VESSEL AS EQUIPPED

This survey sets forth the apparent condition of the vessel, including hull, machinery, equipment, fittings and gear to the best of the Surveyor's ability without removal of bulkheads, panelings, ceilings or other portions of the structure and without the opening of machinery or auxiliaries for internal examinations or their operation for performance study. It represents the Surveyor's honest and unbiased opinion, but in submitting this survey it is understood by all parties concerned that this survey is not to be considered a quarantee of its accuracy, nor does it create any liability on the part of the Surveyor arising out of the reliance on information contained in this

SUBMITTED WITHOUT PREJUDICE.

\$155,000.00

\$950,000.00

JAMES W. STEFFEN, A. M. S.

SURVEY # 1083213

PAGE 7 OF 10

VESSEL:

F/V "NORTHERN EXPLORER"

Division of Investments

NOTES ON VALUATION

The valuations made in this report are exclusive of expendable items, removable personal equipment, possessions, spare parts, stores, bunkers or other consumables. The effective date of the valuation corresponds to the issue date of this report.

There are three accepted approaches used in appraisal analysis:

- COST APPROACH: Based on the proposition that the informed purchaser would pay no more for an asset than the cost of
 producing a substitute new asset with the same utility as the subject asset. When the subject asset is not new, the current
 cost to replace it must be adjusted for all forms of depreciation as of the effective date of the appraisal.
- INCOME APPROACH: Considers the value of the asset in relation to the present worth of future benefits derived from its
 ownership, and is typically measured through the capitalization of a specific level of income. This is the least common
 approach used in the valuation of vessels since it is difficult to isolate income attributable to the asset alone.
- COMPARABLE SALES APPROACH: Also known as Market Approach. Involves the collection of market data pertaining to the
 subject asset being appraised. The primary intent of the market approach is to determine the desirability of the asset and
 recent sales or offerings of similar assets currently on the market in order to arrive at an indication of the most probable
 selling price for the asset being appraised. If the comparable sales are not exactly similar to the asset being appraised,
 adjustments must be made to bring them as closely in line as possible with the subject asset.

The undersigned has used a Market Approach, Sales analysis method for the appraisal of value. Market value is defined as:

"The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- a) Buyer and seller are typically motivated;
- b) Both parties are well informed or well advised, and acting in what they consider are their best interests;
- c) A reasonable time is allowed for exposure in the open market;
- d) Payment is made in terms of cash in United States dollars or in terms of financial arrangements comparable thereto; and,
- e) The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale."

-American Society of Appraisers, The Uniform Standards of Professional Appraisal Practice, 2003 edition-

This market approach for the subject vessel makes use of appraisal guides such as BUC, ABOS, NADA and POWERBOAT GUIDE as appropriate for exact make and model or closest equivalent production vessels, as well as SOLDBOATS actual sales database, broker listings, and internal sales databases, all with appropriate adjustments for vessel age and condition, accessories, and location. Replacement values are based on closest comparable vessel of contemporary (new) manufacture.

CERTIFICATION OF REPORT

- The undersigned is an Accredited Marine Surveyor according to the requirements of the Society of Accredited Marine Surveyors (SAMS). He is an associate member of the American Society of Appraisers, conforming to the Uniform Standards of Professional Appraisal Practice (USPAP).
- The undersigned marine surveyor has personally inspected the subject vessel.
- The undersigned has no financial interest, or contemplated future interest, in the vessel appraised, nor does the surveyor have a personal interest or bias with respect to the parties involved. Fees charged for the appraisal are based on a standard fixed fee and are not contingent on the reporting of a predetermined value.
- The values set forth in this report are presented as the surveyor's considered opinion, and are based on the data, professional analysis, opinions, and conclusions set forth in this report.

This survey is prepared for the exclusive use of the client whose name and address appear on Pages 1 and 2, and this report is not transferable without the client's permission. The intended users of this report and appraisal are the client and those lenders and underwriters considering financing or insuring this vessel for this client only. This report by itself does not contain all the components necessary for a prepurchase decision, and other potential buyers are specifically excluded as third party users of this report.

REPORT # 1093397

VESSEL:

F/V "NORTHERN EXPLORER"

RECOMMENDATIONS

Alaska
Division of Investments

LEGAL REQUIREMENTS: These findings may constitute a violation of USCG or State regulations. They should be addressed before the vessel is next underway.

- 1. The vessel is equipped with safety gear in accordance with Coast Guard Regulations for Commercial Fishing vessels operating outside 12 nautical miles from shore with the exception of the signaling kit. For operations outside 12 miles a complete SOLAS flare kit is required. (46 CFR 28.145)
- **2. All portable fire extinguishers are to be inspected and tagged. Loose units are to be permanently mounted and distributed adjacent exit paths according to CFR 46 28.160.

SAFETY REQUIREMENTS: These findings may constitute an endangerment to personnel and/or affect the vessel's safe and proper operating condition, according to current voluntary standards. They should be addressed before the vessel is next underway, or within the stated timeline.

- 3. Relocate the upright freezer so that a proper ladder can be installed in the engine room access hatch.
- **4. For compliance with Coast Guard Regulations for Commercial Fishing Vessels, belt guards are to be installed on the main and auxiliary engines, and lagging is to be installed on all engine exhausts where they may come into contact with personnel or combustible surfaces.. (46 CFR 28.215, ABYC P-4.5.5)
- **5. For passenger safety, recommend installation of a combination smoke and Carbon Monoxide (CO) detector with audible alarm in each main accommodation space. (ABYC A-24.7.1 and NFPA 302, 12.3)

IMMEDIATE ATTENTION: These items should be corrected prior to continued vessel operation.

**6. The exhaust connection above the #1 generator is poorly made, resulting in a significant exhaust leak. Replace existing clamped connections with welded flange-type connections, properly gasketed and supported. There is also a small leak in the #2 generator exhaust piping, which is to be repaired as found necessary.

DIRECTED ATTENTION: These items should be corrected in the near future to help the vessel maintain its current value and safe and proper operating condition.

- 7. At the time of the survey inspection, the forepeak of the vessel was partially filled with ballast water, and an unknown amount of ballast water was in a stern ballast compartment. No stability report was found aboard the vessel, limiting its usage and apparent suitability for service. Provide a stability booklet prior to future use.
- **8. The shore power cord is improperly installed and is chafing on the back of the main deck house. It is to be wired to a proper marine twist lock end, and a corresponding marine receptacle of suitable capacity is to be hard wired into the vessel's shore power breaker panel. Because the distance between the shore power connection and the main breaker panel appears to be greater than 10 feet, an additional fuse is to be installed between the connector and breaker switch. (ABYC 11.12.2.9.2)
- **9. Service the refrigeration system sea water intake valve and all other sea valves and prove operable. The abandoned 12" valve on the vessel's main sea chest is to be capped to prevent accidental flooding, and the attached 2" seawater take-off is to be provided with a shutoff valve at the sea chest. (ABYC H -27.5.1)
- 10. Prove operable oil pressure and overheat alarms on all engines, to be audible from the main helm station.

WHEN THE STARRED (**) RECOMMENDATIONS ON THIS PAGE ARE CORRECTED, AND WHEN OPERATED BY A KNOWLEDGEABLE, CAPABLE AND PRUDENT SEAFARER, THIS VESSEL, AS CURRENTLY EQUIPPED, CAN BE CONSIDERED AN ACCEPTABLE PHYSICAL RISK FOR THE PURPOSES OF USE, SALE, INSURANCE, AND FINANCE, AND WELL SUITED FOR THE STATED INTENDED USE. RECOMMENDATIONS NOT SO NOTED DO NOT AT PRESENT SIGNIFICANTLY DETRACT FROM THE SUITABILITY OR SAFETY OF THE VESSEL, AND ARE TO BE SATISFIED WITHIN A REASONABLE PERIOD OF TIME, OR AS OTHERWISE NOTED.

REPORT# 1093397

VESSEL: F/V "NORTHERN EXPLORER"

Division of Investments

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RECOMMENDATIONS Continued....

DIRECTED ATTENTION: These items should be corrected in the near future to help the vessel maintain its current value and safe and proper operating condition.

- **11. The four 8V batteries in the main engine starting bank also serve the vessel's other 32V systems. The batteries are in poor condition. Provide new dedicated starting and house batteries for the 32V system. Further, the #1 auxiliary engine starting battery is in poor condition. Replace battery as found necessary.
- **12. Correct reverse polarity in forward crew quarters 120V outlet. Install a filler plate into the opening in the front of the main AC distribution panel. Remove abandoned electrical conductors found in the engine room, pilot house, and elsewhere. Replace numerous extension cords, domestic multi-tap electrical appliances, and residential-type twist on line connectors with approved permanent marine wiring and receptacles. (ABYC E-9.17.12.7)
- 13. 32V DC circuitry is protected by a single fuse block in the steering console. It appears that the 12V devices in the pilothouse are served by a battery inside the steering console and are individually fused. A fused distribution panel is to be installed in the engine room to serve existing 12V and 32V circuitry. Install permanent wiring with proper fuse protection on the holding tank discharge pump in the aft machinery space. (ABYC E-9.11-20)
- **14. The vessel is presently served by a single 120V submersible pump for bilge maintenance. Install an additional automatic bilge pump or pumps, connected to the vessel's DC system, to securely maintain the engine and aft bilges. (46 CFR 28.255)
- 15. Secure draped fuel lines from the engine room to the aft auxiliary engine. Lines should be replaced with permanent, rigid fuel piping.
- **16. Install watertight covers on the aft ballast tanks.

RECOMMENDATIONS: These findings are descriptions of items noted that are of non-structural or cosmetic nature, or which fall under a longer timeline for repair. Corrections to these items will normally enhance the value of the vessel and/or preclude future deterioration of condition or value.

- Replace severely wasted deck beams in lazarette compartment. Inspect ballast tank forward of lazarette for wastage and repair as found necessary.
- 18. Replace Plexiglas pilothouse windows, which are fogged due to extended U V exposure, with Lexan or heavy duty safety glass.
- 19. The vessel's sanitary holding tank is temporarily piped, and the tank vent is open to the aft machinery space. Permanently install the tank discharge pump and piping, and route the vent line overboard. A deck pumpout connection is to be installed for compliance with 33CFR159.85.
- 20. Interior hull surfaces aft of the engine room have coating failure, and are to be properly prepared and coated against corrosion.

WHEN THE STARRED (**) RECOMMENDATIONS ON THIS PAGE ARE CORRECTED, AND WHEN OPERATED BY A KNOWLEDGEABLE, CAPABLE AND PRUDENT SEAFARER, THIS VESSEL, AS CURRENTLY EQUIPPED, CAN BE CONSIDERED AN ACCEPTABLE PHYSICAL RISK FOR THE PURPOSES OF USE, SALE, INSURANCE, AND FINANCE, AND WELL SUITED FOR THE STATED INTENDED USE. RECOMMENDATIONS NOT SO NOTED DO NOT AT PRESENT SIGNIFICANTLY DETRACT FROM THE SUITABILITY OR SAFETY OF THE VESSEL, AND ARE TO BE SATISFIED WITHIN A REASONABLE PERIOD OF TIME, OR AS OTHERWISE NOTED.